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# The Appreciation of Music

ALBERT GEHRING

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THE  
APPRECIATION OF MUSIC

BY

ALBERT GEHRING



CLEVELAND



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**TO  
F. X. ARENS**



## P R E F A C E

The following chapters are a condensation of a series of lectures delivered some years ago at the College for Women, Cleveland, Ohio. They are intended, especially, for the large class of readers who are interested in music, but who have never made a study of it and are ignorant of its technical aspects. The aim is to give an insight into the structural features of the art, without bewildering with long and pedantic discussion. Clearness and simplicity of exposition are therefore the only ends sought. A careful study of the contents, coupled with intelligent listening in the concert-hall will, it is hoped, enable even the layman to gain considerable knowledge about the complexities which usually appear so formidable.

While the author has attempted to be original in the method of presentation, it was almost unavoidable for him to undergo the influence of existing treatises in regard to the subject-matter of his book. This is so especially with reference to the choice of technical terms, the classification of musical forms, and the like. Naturally it was better to follow the path of accepted authorities in these things than to attempt novel presentations at all costs. Among the works to which obligation is due may be mentioned: Elson's *Theory of Music*, Bussler-Cornell's *Theory and Practice of Musical Form*, Parry's *Art of Music*, and Grove's *Dictionary of Music and Musicians*.

The illustrations have mainly been drawn from the realm of instrumental music, the reason being that most of the subjects considered, *e. g.* counterpoint, thematic work, and instrumentation, have found their best embodiment in this species of music. Insofar as vocal compositions make use of the features in question, they are effective in the same way as compositions performed solely by instruments; hence what is said of the latter will also apply to the former.



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## THE FACTORS OF MUSICAL APPRECIATION

It is not unusual to hear the remark: "I thoroughly enjoy music, and can listen to it by the hour, but I am not competent to judge of its beauty and excellence."

Whenever a man talks like this, we are tempted to assure him that he does, in fact, possess the essential requisites for the appreciation of music, and that all those technical matters about which he is ignorant are by no means as important as he imagines. If his thoughts are elevated by the tones, if they bring tears to his eyes and awaken poetic sentiments, he simply does appreciate them, even though he has had no musical education and has never heard the names of Palestrina or Bach.

The musical sense or feeling, the naive, spontaneous delight in listening to melodies and harmonies, is the fundamental and essential factor in the appreciation of the art of tones. It is the substance of all genuine enjoyment, without which the most comprehensive understanding of the art and appreciation of its technical difficulties can avail but little.

Generally it is supposed that the ear itself plays an important part in the enjoyment of music; whence the corollary might seem to follow that the more acute that

organ, the greater the enjoyment. This is a fallacy. The ear, however necessary, is merely the vestibule of musical delight: it corresponds to the lens of a stereopticon, without which no picture can be projected on the canvas beyond, but which by itself is not capable of producing any effects. The sense for absolute pitch, for example, though highly desirable, is not indispensable. And it is even possible to enjoy compositions without being unusually acute in the detection of impure intonation. Indeed, too sensitive an ear may even act as a bar to enjoyment; for the music one actually hears is not always faultless in intonation, whence many renditions which may be relished by more ordinary ears will shock those which are fastidious.

In laying so much stress on the elementary susceptibility, as a fundamental and almost sufficient factor of appreciation, it may appear as if we were limiting ourselves to the more ordinary, lighter kinds of music — which can in fact be enjoyed without special training — while ignoring more classic styles of composition; though popular music appeals universally, deeper compositions, it would seem, may only be appreciated as the result of minute and extended study. We doubt whether such sweeping assertions are justified. If the laity do not find more enjoyment in classic music, it is because they lack the necessary opportunities of hearing and becoming accustomed to it.

Here we arrive at the second condition of appreciation. We have all noticed that a composition which at first

failed to appeal to us, gradually became more interesting as we heard it repeated, until finally it aroused thorough enjoyment. Classic music, especially, must be heard often to be understood. Holmes mentions three things which improve with age, — meerschaum pipes, violins, and poems ; he might have included musical compositions, which likewise gain their ripest charm after they have been lying in the mind for a length of time, fastening themselves to it as with a thousand tentacles. Familiarity, then, is the second condition of appreciation. With some native susceptibility and a repeated hearing of good compositions, even those without any special preparation can frequently come to enjoy such music.

Nevertheless there are features in classic music whose appreciation requires a certain culture : as in architecture, the understanding of technical details will reveal charms which do not exist for the layman. Two headings may be mentioned, subsuming the training necessary to master these things :

1. The Analysis of Simultaneous Aspects.
2. The Analysis of Successive Aspects.

The first involves two factors : (1) Counterpoint and (2) Simultaneous instrumental qualities.

The second involves three factors : (1) Successive instrumental qualities, (2) Thematic Work, and (3) Musical Form.

Practically the recognition of simultaneous instrumental qualities merges with that of successive ones, as

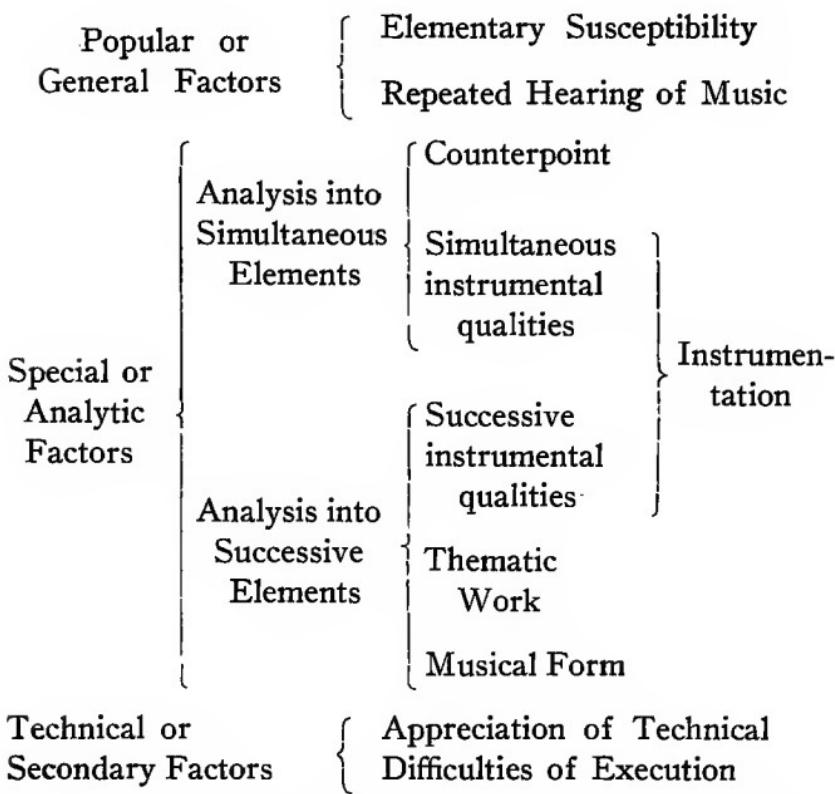
an abstraction of one from the other would prove rather arbitrary. The more natural method is to keep them united under the general heading of instrumentation. Whereas counterpoint, then, demands an analysis of simultaneous elements, while thematic work and musical form deal with successive ones, instrumentation involves the recognition of simultaneous as well as successive features.

In addition to these "analytic" factors, we must mention the appreciation of technical difficulties of execution. Strictly speaking, this is not a source of musical delight at all. In kind, it is not different from the enjoyment derived from the contemplation of gymnastic feats. But it is constantly associated with the rendition of music, and may pass as a legitimate adjunct of the pleasure which it affords. While it may be shared by laymen as well as connoisseurs, it will be heightened through education and the detailed acquaintance with the difficulties of musical rendition.

Still further removed from the domain of musical pleasure are the feelings experienced by the performers during the rendition of pieces. These involve muscular sensations, the consciousness of technical mastery, thrills of success, the satisfaction of vanity, and so forth, and need not concern us in the present treatise.

In conclusion it will be well to exhibit all the factors of appreciation in a table, subdividing them into popular or general, special or analytic, and technical or secondary factors.

## FACTORS OF MUSICAL APPRECIATION 13



In the following chapters we shall examine the various analytic sources of pleasure. Of the popular elements, spontaneous in nature, but little can be said; and the same is true of the appreciation of technical difficulties. So far as the enjoyment of music depends on them, explanation will help but little; but so far as it depends on counterpoint, instrumentation, thematic work, and musical form, study and exposition may prove to be of valuable assistance.

## COUNTERPOINT

ALL music is successive in nature, *i. e.*, its parts follow one another in time. Without this we could not conceive of the art. A composition with members existing side by side, like the figures of a picture, is impossible. But whereas succession is necessary, side-by-sideness or simultaneity is not. The simultaneity is possible and allowable, but not essential; and according to its presence or absence we classify music as monophonic, homophonic, and polyphonic or contrapuntal.\* In monophonic compositions but a single tone resounds at a time. This species of music resembles discourse, in which the words follow one another in single file, without ever locking arms in concomitant progression. As an example we may take any unaccompanied melody, such as the following German air:—



By adding a simple accompaniment, we obtain an example of homophony:—

---

\* Some writers distinguish only between homophonic and polyphonic music, including monophonic with the former.

Here more than one note is played at a time. But the notes of the accompaniment have no independence, serving only as a background for the melody. "Similar-sounding" music may, indeed, be defined as music in which various tones are "blended into a single mass." It resembles monophony in its unimelodic structure, but differs in the presence of the accompaniment.

In polyphonic compositions we not only have various parts or voices, but also themes or melodies. The German song, with its accompaniment, is an example of homophony. So is the following waltz tune:—

WEBER: *Der Freischuetz.*



By combining both of these melodies,

Three staves of musical notation on three systems. The first system shows the combined melody with a key signature of three sharps (G major). The second system shows a bass line with a key signature of three sharps. The third system shows a continuation of the melody with a key signature of two sharps.

we obtain an example of "many-voiced" music.\* The parts need not be as extended and melodically inde-

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\* The melodic alterations were made in order to effect a more satisfactory harmonic combination. Even as it is, the example is not a model of elegance, but the clear and popular nature of its component melodies may excuse its introduction.

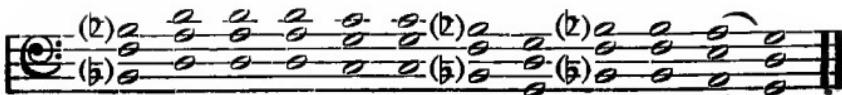
pendent as those in the illustration, but they must have a certain melodic character and flow, not serving, like the notes of the accompaniment, as a mere background or enrichment.

Historically, contrapuntal music grew out of monophonic, and in turn gave rise to homophonic. Almost all tonal composition previous to the ninth century belonged to the unimelodic category. Greek music is a case in point; for although the Greeks may have had some knowledge of harmony, they made but little practical use of it; and the Romans made no advance upon the Greeks in this respect. Many-voiced writing is a product of western, Christian civilization, and hardly dates back a thousand years. According to Parry, the occasion for its arisal is probably to be found in the difference of voices among the singers in Christian churches: while all were supposed to sing the same songs, some were higher and some lower in pitch, the result being that the songs were executed at different intervals, the intervals first chosen being the fifth and the fourth.\* Here is an example of such a combination of voices, taken from one Hucbald, a Flemish monk who was born in the ninth century:—\*\*

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\* Parry, *The Art of Music*, New York, 1893, p. 92.

\*\* The example is copied from Ritter's *History of Music*.



To modern ears such a progression sounds hideous, but to those of Hucbald it seems to have been highly gratifying. As is apparent, the voices constantly move parallel to one another: when one goes up or down, the other does likewise. Among the early advances over this practice was their independent movement, parallel alternating with contrary motion. And as practice lessened the difficulties, there also came an increase in the number of separate parts, leading finally to compositions with eight, twelve, sixteen, or more voices.

A favorite form of polyphonic composition was the canon. This is a piece in which various parts execute the same melody with different starting-points, one part always beginning a little later than the other. Measure one introduces the first voice; with measure two the second may enter, closely following upon the heels of the first, and taking up the identical tones which it has dropped,—only, of course, a measure behind; and so on with the other parts. The following is a canon for two voices, from Schumann's *Papillons*:—



The most elaborate of the polyphonic types of music is the fugue. This may roughly be defined as a contrapuntal species of composition in which a theme is systematically announced and answered in various voices, generally being contrasted by *episodes* of transition and modulation.

Like all contrapuntal music, the fugue is likely to sound confused and meaningless when one has not been trained for its appreciation. Its effect has been compared to that of throwing the tones together in a barrel and revolving the barrel. An intelligent enjoyment demands that one follow the voices separately in their devious windings; the masses of sound must be broken up into the co-existing melodic factors; the soprano, alto, tenor, and bass, so far as they contain important progressions, must stand forth by themselves, instead of being blended into a single homogeneous continuum.

The Germanic races have always been more partial to polyphony than the Latin, a fact which is in line with Germanic tastes in all the other arts. Counterpoint im-

plies complexity, and the Teutons have ever been fond of this. The Greeks and Latins love clearness and simplicity: witness the chaste, plain temples, simple statues, and plastic, uninvolved tragedies of the old Hellenes, the smoothness and lucidity of French literature, and the simplicity of Italian operas. How different the Gothic cathedrals, with their forests of pillars and mazes of decoration, the pictures of old Lucas Cranach, with their painstaking elaboration of details, and the dramas of Shakespeare, with their multitudinous characters and interweaving of plots and scenes! What a fitting pendant to these latter the contrapuntal intricacies of northern music! Can we wonder that the Italians, always somewhat antagonistic to Gothic architecture, should eventually have turned away from polyphony as well, and applied themselves to the cultivation of a more congenial style?

The antipathy to counterpoint was one of the underlying causes that impelled certain Italian musicians of the sixteenth century toward the search for a newer and simpler method of composition, and that ended, finally, in the creation of modern homophony. At first confined to the opera, this newer style was later extended to instrumental music, and eventually became the recognized method throughout the realm of tones. It may seem strange, but it is a fact, that a simple Strauss waltz, or a folk song with accompaniment, embodies one of the latest products of artistic invention, a scheme of composition that only dates back three hundred years, and

that was preceded by many centuries of slow development in polyphonic methods and indefinite periods of monophonic practice.

We must not suppose, however, that modern music is purely homophonic in character, and that polyphony has become archaic. Considerable use has always been made of it, especially in classic compositions. The *Allegretto* of Beethoven's seventh symphony teems with examples. The movement opens with a simple theme, purely homophonic in character. This is followed by several contrapuntal variations, in which the melody is accompanied by a subsidiary progression, some notes below. Here is a section of the first variation:—

A musical score for piano or harpsichord, featuring two staves. The top staff is in treble clef, G clef, and common time (indicated by '2'). The bottom staff is in bass clef, C clef, and common time (indicated by '4'). The music consists of two measures. In the first measure, the treble staff has a single note followed by a sixteenth-note pattern. The bass staff has a sixteenth-note pattern. In the second measure, the treble staff has a single note followed by a sixteenth-note pattern. The bass staff has a sixteenth-note pattern. The music is written in a clear, musical notation style with various note heads and stems.



The next example shows how counterpoint is sometimes used incidentally,—for a measure or two. The first two measures are homophonic in character, with the theme in the soprano; in measures three and four the theme is imitated in the alto, the soprano meanwhile continuing independently, and returning to the original progression in measure five. For the sake of clearness, the thematic notes are indicated by asterisks:—





It is a common device of Beethoven's, after introducing the theme in various forms, to present it in fugal guise. The present case is no exception, and he employs the following fragment of the melody:—



This is repeated about half a dozen times, in different voices and instruments. First it enters in the alto, next in the soprano, then in the bass; and so it migrates from voice to voice, until finally it leads to a majestic reappearance of the original theme. The other voices meanwhile accompany the melody in independent motion, thus lending the passage its contrapuntal character. A section is appended, the thematic notes again being indicated:—





Owing to the homogeneity and inferior agility of the voice, and the resulting difficulty of following simultaneous progressions when executed by this medium, counterpoint has not been cultivated so extensively in modern vocal music. Going back, however, we find splendid examples of it in the Passion Music of Bach and the oratorios of Händel.

Among pianoforte compositions which are remarkable for polyphonic effects we may mention the rondos of Beethoven's sonatas Op. 26 and Op. 31, No. 1, Chopin's étude in C sharp minor, Op. 25, No. 7, Schumann's *Warum*, and last but not least, the fugues of Bach.

## THEMATIC WORK

WHEN a minister prepares his sermon he chooses a text, which serves him as a nucleus of thought and which he introduces with manifold applications and variations; and when a poet writes a lyric he may find a similar nucleus in the refrain. Sometimes the refrain occurs in the same form throughout the poem, sometimes it is subjected to modifications. The word *Nevermore*, in Poe's *Raven*, is a familiar refrain.

Architecture illustrates still better the recurring employment of elements or forms. Some buildings, for example, make constant use of the round arch: there are round arches over the doors and windows, arcades of round arches, and the same figure is used profusely in the decorations. In other cases we have an adherence to the pointed system. The doors and windows are surmounted by elongated arches, and these may be ingeniously grouped,—two small arches combining to form a larger unity, and two of these larger organisms uniting in the formation of a still more extensive combination.

Music also makes use of such texts, refrains, or recurring figures. The principle involved is of supreme importance for the art, and it is to the *thematic work* in

which it is embodied that much of the peculiar charm of classic compositions is due.

As poetry is composed of words, so music consists of tones; and as the words must be united into phrases and sentences in order to make sense, so the tones, if they are to interest us, must be combined into figures, motifs, or themes. The note *a*, played on the piano, is not particularly interesting; but the notes *a f e d* possess a certain individuality and significance. They constitute a



figure or motif, which seems to speak to us and say: "Let me introduce myself and impress myself on your memory as this particular group of tones; you will recognize me hereafter whenever we meet, even without knowing my name; but if you believe in formalities, and wish information regarding my connections, I am the subject of the last movement of Beethoven's Sonata in D minor, Op. 31, No. 2."

Such are the figures or themes that correspond to the texts of sermons or the forms used in architecture. And as the minister dwells on his text, exhibiting it in various aspects, while the architect employs his arch in manifold situations, forms, and combinations, so the composer introduces his subjects in the greatest variety of shapes and disguises.

It is evident that a little figure like this can be subjected to many variations without losing its identity. It can be played as it was originally written:



likewise it can be played one half or one fourth as fast,— in augmentation:—



or twice as fast, in diminution:—



Once more, it can be transposed into a higher or a lower key:—



It may be expanded or contracted, making use, in the case of expansion, of wider, and in the case of contraction, of narrower intervals: —



It can be inverted, moving upward where it formerly moved downward, and *vice versa*:—



The rhythm of the figure may be imitated, with tones of any intervals, or even with the same tone throughout:—



Finally, not to specify further, any number of the foregoing variations can be combined; for example, the fig-

ure can be inverted, expanded, and played in augmentation, all at the same time:—



It can also be played softly or loudly, and, in the case of music for various instruments, rendered by any single instrument or any combination. At one moment it may be sounded by the violins, then assumed by the cellos; next it may jump up to the flutes, and later settle down in the trombones; now it may be rendered by a single instrument, now presented by a whole group, and anon proclaimed *fortissimo* by the entire orchestra.

We realize what fine, tractable material the composer has at his disposal in the tones and themes, with what interesting forms he may erect his musical buildings, and of what infinite variations and combinations these forms are susceptible. Whoever has read Emerson's *Compensation* must have been delighted to find the same principle greeting him in every walk of life, turning up again and again under countless forms and disguises, ever the same principle. And whoever has studied biology must likewise have been pleased to perceive the same general types of structure running through many classes of animals or plants; to recognize, for example, how the arms of man, the legs of horses, the wings of birds, and the flippers of whales, are all built upon the same plan. Similar is the pleasure yielded by music rich in thematic treatment. Here too it is a delight to follow a simple theme through a maze of complicated variations,—to watch it as

it soars to the clear, serene heights of the treble, then descends with force to the rugged bass; as it dwindles to a whispering *pianissimo*, and emerges again in a triumphant *fortissimo*; as it assumes a dozen varying colours and costumes,—gliding by gently in the cellos, like a lovesick cavalier, faltering along in the oboe, like a forlorn shepherd, bouncing past in the bassoons, similar to a grotesque clown, and riding on merrily in the trumpets, with the air of a conquering hero. In listening to such a variegated throng of themes, it appears, at times, as if we were overhearing life itself, with its endless masqueradings and pageants and illusions, — and with the same beneficent laws regulating it all, “glorious as on the first day.”

To illustrate various kinds of thematic treatment, let us analyze Beethoven’s overture to *Egmont*. There are two figures which serve as the basis of elaboration. They may be designated arbitrarily as the first and second figures:—

First figure.

Second figure.

The first figure is the one which opens the introduction to the overture, the second occurs near its middle. It is initially presented in single notes, as in the example,

next in thirds, then in octaves, thereupon in triads, once more in single tones, and then again in octaves, but in quarter instead of eighth notes, *i. e.*, in augmentation. Here are the last three measures of the introduction:—



Now the *allegro*, or overture proper, begins:—





The opening notes are the same as those with which the introduction closed,—only they are much faster. The motif is repeated several times, with the first note dropped and the accent shifted. At the end of the fourth measure, then, the “chief theme” appears. An analysis shows that it is derived from the second figure, of which its initial notes are an augmentation, expansion, and transposition, with a rhythmical change:—



The subordinate theme, which occurs about fifty measures later, is derived in part from the first figure:—



One of the most interesting parts of the overture is to be found in the middle of the *allegro*, where the chief

theme is subjected to a remarkable imitative and harmonic treatment:—

The image displays three staves of musical notation, likely from a piano score. The top staff shows a melodic line in the treble clef, starting with a dynamic of *p* and a marking of *dolce.*. The middle staff shows harmonic support with eighth-note chords. The bottom staff continues the harmonic pattern. The music consists of measures 1 through 4 of a piece, demonstrating thematic work through imitation and harmonic variation.

At the beginning of the *coda* \* there is a characteristic passage based on the rhythm of the subordinate theme (and thus also of the first figure) :—

\* See p. 58.



And now comes the glorious *Finale*. It is so different from the overture proper that at first sight there seems to be no thematic resemblance between the two. Yet the opening motif is a subtle modification of the second figure, of which it is a rhythmically altered inversion. These are the initial measures:—





The derivation can be rendered apparent if the original rhythm of the figure is changed:—



Interesting and varied though all this is, the thematic features of the overture are not yet exhausted; but enough has been shown to illustrate the principles involved. The next chapter will be devoted to an extension of these principles, as embodied more especially in the *leit-motif* of Richard Wagner's music dramas.

## THE LEIT-MOTIF

THE *leit-motif* owes its development to the genius of Wagner. For the sake of simplification, accordingly, let us confine ourselves to the works of this master. What is true of them will also apply to other compositions.

Wagner's music may be regarded as a reinforcement of the action on the stage. Like the gestures and facial expressions with which we accompany our speech, it adds vividness and force. And it does this largely by means of the *leit-motif*. In our conversation we often employ the same glance or movement if the thoughts we are expressing are similar. When we are gay our face will assume one appearance, when we are sad, another. Surprise will make us clap our hands together or throw our eyes upward, doubt or hesitation shrug our shoulders. The *leit-motifs* may be compared to such typical manifestations, accompanying the occurrences on the stage. If something sad occurs, a corresponding expression or gesture of sadness, as it were, will evince its presence in the orchestra; if something joyous happens, another motif will indicate this fact.

A *leit-motif*, indeed, may be defined as a musical figure with a meaning,—a group of notes that represents

or corresponds to some aspect of the play: some person, thing, event, or thought.\* In the series of music dramas designated as *The Ring of the Nibelung*, for example, there is a figure — the horn motif — which accompanies the young hero, Siegfried: whenever Siegfried significantly enters the scene, or when he is merely referred to by other persons, this figure is likely to resound in the orchestra. Similarly, when Walhalla, the home of the gods, is mentioned, the Walhalla motif will indicate this fact. Further motifs are those of the giants, dragon, gold, fate, pity, and reflection,—all answering to corresponding dramatic aspects. The following are the figures mentioned:—

---

\* It will be remembered that we are confining ourselves, for the present, to the opera, which is practically the only form of music cultivated by Wagner.

Reflection.

Gold.

Pity.

Dragon.

By some this device has been derided as childish. The motifs have been compared to the "lettered ribbons issuing from the mouths of people in mediæval pictures."\* It is said that there is no inner connection between them and the things denoted, and they are designated as arbitrary signs or labels. This view of the matter, however, is not correct. Words and names, also, might be treated as arbitrary symbols, attached to the people or things for which they stand. And

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\* Cited by Krehbiel, *Studies in the Wagnerian Drama*, New York, 1891, p. 20.

yet, what charm may be theirs: what poetry in the names of the old Norse gods and heroes, what sweetness in those of the persons we love! The association of the arbitrary letters and the objects signified has imbued the former with the qualities of the latter, and so endowed them with rich meaning and sentiment. The same will be true of the musical words or *leit-motifs*: even though they embodied no essential relation or similarity to the occurrences on the stage, they might still be expressive of them, glowing with meaning and charm.

However, it is not true, at least of Wagner's motifs, that they embody no relation or similarity. How appropriately the motifs given above express their dramatic counterparts, and how inappropriate they would be if their counterparts were exchanged,—if the horn motif were to represent the dragon, and the motif of pity the giants! Among the most faithfully descriptive figures are those which symbolize some sudden or mysterious transformation. Of these we shall instance three: the motif of the Enchanted Helm, which enables its possessor to change his identity; the motif of magic sleep; and the motif of "treachery by magic," employed also for the potion of forgetfulness. It would be difficult to imagine a more realistic portrayal of these things than that of the actual figures:—



Enchanted Helm.

Musical notation for 'Potion of Forgetfulness.' featuring a treble clef, a key signature of one sharp, and a time signature of common time. The notes are eighth and sixteenth notes.

Potion of Forgetfulness.



Sleep.

It will now be in order to exhibit some of the interrelations of the figures, and explain the method of their employment. The nature motif, or motif of the original element, is supposed to represent the source or heart of nature, from which everything develops, — which is indicated by its ascending, evolving movement, every step which it contains being followed by a higher one:—



There is great similarity between this motif and the motif of Erda, the goddess of the earth, who, representing the aboriginal element and foreseeing everything,

may also be considered as the basis of the world:—



The main difference lies in the fact that one figure is in the major key, while the other is in the minor. The ground of the resemblance is to be found in the similarity of the things symbolized; however, while nature is fresh and joyful, there is something weird and mysterious about the gray old goddess, whence the minor key of her theme.

These two themes represent the beginning or source of things; but there is one for the end as well (*Twilight of the Gods*):—



This is the reverse of the other motifs: there we have an upward movement, here the progression is downward; there, accordingly, we receive an impression of growth, here one of downfall and dissolution.

In this instance we have been considering the relations between different motifs. But one and the same figure may also be subjected to modifications. Throughout *Siegfried*, where the hero is still a joyous, roving forest-lad, the group of tones with which he is accompanied assumes the simple form



in *Götterdämmerung*, where he has ripened into a mature hero, it grows broader and more massive:—



and after his death, in the same work, it changes into the minor key:—



By means of the *leit-motif* it is possible to portray what the actors are merely thinking of. In the drama this can only be accomplished by the facial expression of the players, or by their uttering the thoughts aside. The *leit-motif*, however, enables us to portray directly. When Sieglinde, in the first act of *Die Walküre*, espies the weary Siegmund at her hearth, the motif of pity tells us what is going on in her heart; and when Siegmund, after drinking from the horn she has offered him, rests his eyes on her features, that of love reveals the growing passion in his breast, even before he has uttered a word.

By combining motifs simultaneously and successively, entire stories may be illustrated. In the *Magic Fire Scene* of *Die Walküre*, for example, an appropriate combination of themes enables the composer to depict the flickering fire, the sleeping heroine, and the anticipation of the hero who is to pierce through the flames and

rescue her. And in the third act of *Götterdämmerung*, while the body of Siegfried is being borne back to the castle, a succession of appropriate motifs recalls all the salient aspects of his career. This combination of motifs produces some of the most telling effects.

Although the *leit-motif* has been employed preferentially in the opera, instrumental music has also taken hold of it. Here too it serves to indicate the things which the composer wishes to depict, the difference being that these are only imagined by the hearer instead of being represented before his eyes. All in all, the *leit-motif* is an ingenious, valuable device, and is destined to play an important part in the future development of the art.

## MUSICAL FORM

MUSIC is permeated with form. There is architecture in it from its simplest elements to its most intricate combinations.

Already in mere tones—the elements of music—do we meet with form; for it is the regular arrangement of the vibrations constituting tones which distinguishes the latter from noises, with their irregular, haphazard oscillations.

The arrangement of tones in the scale also involves form. Every octave contains twelve tones, whose mutual relations are regulated by certain rules. Starting with any designated note, such as C, we find that the octave above makes just double its number of vibrations: while C vibrates once, the octave will do so twice. Similarly the fifth above, or G, makes three vibrations while C makes two, the fourth, four while C makes three, and so on with the other intervals. Practically there are certain deviations from these proportions, but they are not great enough to destroy the method of disposition.

In time, the form is so apparent as merely to need mentioning. Music is divided into measures, which are again subdivided into two, three, four, or more

equal beats, represented by the signatures  $\frac{2}{4}$ ,  $\frac{3}{4}$ ,  $\frac{6}{8}$ , and so forth. These groupings are the moulds in which all music is cast, the squares on the musical checkerboard, over which the melodic and harmonic figures must move.

Passing to the figures themselves, we again find order and plan. The simultaneous combination of tones into chords, and the sequential connection of chords, are dealt with in that branch of musical theory known as harmony or thoroughbass. We shall not stop to consider the details of this study, but pass directly to a consideration of the rules governing successive combinations, according to which melodies and larger organisms are constructed. Here we enter the domain of musical form, in the more specific sense of the word. The symmetries and arrangements so far considered were formal in nature, to be sure, but the term "musical form" is generally applied only to those larger, architectural features which are analogous to the structural arrangements in a building.

In poetry, says a writer on music, we find "syllables combined into different feet, as the dactyl, anapaest, iambus, trochee, etc., poetic feet combined into lines, lines into stanzas, and stanzas into complete poems. In exactly the same manner we find musical notes combined into figures, figures into phrases, phrases into periods, and periods into complete movements."\*

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\* Elson, *The Theory of Music*, Boston, Sixth Edition, p. 129. This statement, however, must not be interpreted too rigorously,

The figure is the smallest group resulting from the combination of notes. The following are two figures from Mozart, the first being from his sonata in A major, the second from his symphony in G minor:—



Whereas single notes are meaningless, these combinations already reveal a certain individuality and life.

This becomes more pronounced as we pass to phrases, examples of which may be obtained by extending the figures just given:—

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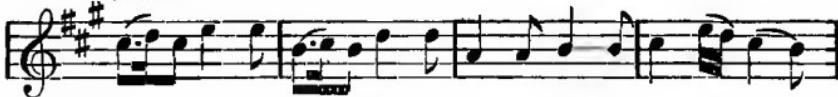
after the fashion of our arithmetical tables, as if figures made phrases, phrases periods, and periods complete movements, without any intermediate members or freer interpolations. In the higher kinds of composition, especially, the combination of parts is not fettered by such inflexible rules; sonatas, for example, by no means consist merely of regular periods, accurately joined together, but freely intermingle the stricter, periodic structures with passages of a more transitory, formless character.

There is no exact rule governing the number of measures in a phrase. "The phrase is essentially an element of melody embracing *two* (at the least) *or more* measures terminated by a *cadence* of some kind, and sensibly forming a separate group by itself."\* Or in the words of another writer: "Where there are distinct portions marked off by closes like full stops, and half closes like stops of less emphasis . . . the complete divisions are generally called periods, and the lesser divisions phrases."\*\*

We pass to the periods. Quoting from the first authority again, we may define a period as a structure "constituting in itself a little piece of music, or forming in conjunction with other periods a member of a larger composition . . . The period, in its typical and most usual form, consists of *two four-measure phrases*, the first being generally called *Thesis*, the second *Antithesis*."<sup>\*\*\*</sup>

Again continuing the development of the Mozart figures, which have already been spun out into phrases, we obtain periods:—

*Thesis.*



\* Bussler-Cornell, *The Theory and Practice of Musical Form*, New York, 1893, p. 24.

\*\* Grove's *Dictionary of Music and Musicians*, Article on *Phrase*.

\*\*\* *Op. cit.*, p. 27.

Antithesis.

Thesis.

Antithesis.

Inasmuch as it consists of *phrases*, the period might appropriately be styled a musical *sentence*. Like a verbal proposition, it is able to stand alone, and convey a complete musical thought, figuratively speaking. But it could hardly, as yet, be called a piece or composition. In order to obtain pieces we must combine several periods. (Sometimes the junction of phrases will answer the same purpose.) The simplest imaginable combination would result from the union of two divisions. When the first of these again forms a *Thesis*, and the second an *Antithesis*, we obtain the most elementary structure or *form*, in the more architectural sense of the word. It is sometimes called the *Lied-* or *Song-Form*, a designation which it owes to the fact that many folk songs are written in it. But numerous other simple and popular kinds of music also make use of it, whence the name *Song-Form* has been rejected as misleading by some

writers, and the term *Two-Part Primary Form* substituted.

Once more let us develop our original examples:—

The musical score consists of five staves of music. The first four staves are in G major (two sharps) and 2/4 time. The fifth staff begins with a key signature of one sharp, indicating G major, and also uses 2/4 time. The music is divided into measures by vertical bar lines. The notes are represented by black stems pointing upwards, with some stems having small dashes or dots near the top. Measures 1-4 of the first staff begin with eighth-note pairs. Measures 1-4 of the second staff begin with eighth-note pairs. Measures 1-4 of the third staff begin with eighth-note pairs. Measures 1-4 of the fourth staff begin with eighth-note pairs. Measure 1 of the fifth staff begins with a quarter note followed by an eighth note. Measures 2-4 of the fifth staff begin with eighth-note pairs. Measures 5-8 of the fifth staff begin with eighth-note pairs.



Here we see how, by merely joining two complementary periods, we have obtained neat little pieces, capable of standing all by themselves as independent musical organisms, and of which the former, in fact, constitutes the theme for the variations of Mozart's A major sonata.\* Where the periods, as in these cases, are eight measures in length, we have the small two-part primary form, where they are sixteen, the large. By uniting three instead of two divisions (periods or phrases), we get the three-part primary form. Here too there is a small and a large form, according to the length of the sections.

It is on the basis of musical form, as we have begun to elaborate it, that compositions are generally classified. To be sure, there are other principles of distinction. We may divide pieces according to the number of people required for their rendition, *i. e.*, into solos, duets, trios, quartets, choruses, and the like. Or we may classify them according to the nature of the instruments executing them,—into vocal and instrumental compositions, and among the latter into compositions for the

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\* The last two measures of this example are supplementary. The second period might conceivably have ended like the first,—omitting the additional measures. These latter, however, impart a more elegant, rounded finish.

piano, violin, cello, and the various other media of performance. Again, we may group them with reference to their uses and accompanying circumstances,—thus obtaining, among other categories, dance, military, church, and parlour music. But the most scientific classification is that which is based on the forms or moulds of construction. It is on this basis that we designate pieces as variations, minuets, scherzos, rondos, sonatas, symphonies, and overtures. This division is analogous to the scientific classification of animals and plants. In the grouping of life, too, various other methods are possible: animals may be divided into the wild and domestic species, plants into vegetables, trees, flowers, weeds, and the like; but the deeper classification ignores these artificial distinctions, and proceeds according to the essential types of structure.

Folk-songs are generally written in the primary forms, while most varieties of dance and parlour music consist of combinations of primary forms. Our modern waltzes, for example, usually comprise four or five separate parts, or *waltzes*, each of which, as a rule, contains two or three sixteen-measure periods, and thus constitutes a large primary form.

The minuet, an important type of composition, is in slow three-part time, and usually consists of two large three-part primary forms, of which the first is called the minuet and the second the trio; the trio is always followed by a repetition of the minuet. The following is a scheme of the minuet form:—

Minuet	Trio
( in three-part primary form )	( in three-part primary form )
1st period	1st p.
(repeated)	2nd p.
2nd p.	3rd p.
(repeated)	(repeated)
3rd p.	2nd p.
(repeated)	3rd p.
Repetition of Minuet	
1st p.	2nd p.
(not repeated)	3rd p.
(not repeated)	

The scherzo, generally cast in the same mould, is apt to be of a playful nature, employs various rhythms, and uses more licenses of construction. In general the rules of musical architecture are subject to many exceptions. The forms must not be regarded as fixed and unchanging, mathematical moulds, into which the tones are poured. They exhibit many irregularities in regard to details, and even their more essential features have constantly been changing.

Although the minuet and scherzo embody considerable complexity, there are certain types of structure, such as the sonata and symphony, which are more elaborate still. Before passing to these, however, to which we may reserve a special chapter, it will be well to begin at the bottom once more and repeat the various factors of musical form, climbing from step to step and reaching out in ever wider symmetries. First we have regular

vibrations, giving rise to tones. Regularly disposed tones give rise to the scale when the disposition has reference to pitch, and to beats and measures when it has reference to rhythm. Tones combined simultaneously yield chords and harmonies, tones combined successively produce melodies and pieces. The smallest melodic elements are the musical figures; figures are united into phrases, phrases into periods. The union of two or three periods gives rise to the simplest of the musical *forms*,—the two or three part primary forms, in which most folk-songs are written. These again, united according to certain rules, and in conjunction with specific rhythms and tempos, yield most of the higher and more complex forms, of which we have instanced the minuet and scherzo, together with the various species of dance music. Combinations of such pieces, finally, and of various forms not yet considered, produce the sonata, symphony, and concerto, which represent the most elaborate of existing musical structures.

We see, accordingly, how form permeates all music: it is present already in the single tones, and present likewise in the highest combinations of tones. One group or form perpetually reaches out and includes others: what is a complex and a collection on the one hand, when viewed in relation to its constituent members, in turn becomes a member or an element, when viewed in relation to a higher complex. Music thus presents the spectacle of a harmonious organism, in which all the

parts work together without friction, and coöperate toward a noble end.

Indeed, when we listen to a sublime symphonic movement of Beethoven, in which every chord and note is in the proper place, and perfection and beauty are stamped on every measure, we feel like exclaiming with Goethe:—

How each the Whole its substance gives,  
Each in the other works and lives!  
Like heavenly forces rising and descending,  
Their golden urns reciprocally lending,  
\* \* \* \* \* \* \* \* \* \* \* \*  
Filling the All with harmony unceasing.

Music thus becomes a fitting picture of the cosmos, in which cycle includes cycle, and system interpenetrates system; as likewise of that ideal state of human life, individual and social, in which all desires and aspirations complement one another, and harmony and coöperation reign supreme.

## THE SONATA AND THE RONDO

THE sonata form is not confined to sonatas proper, but forms the basis of numerous other compositions, and appears under various names. A symphony may be defined as a sonata written for the orchestra, a string quartet as a sonata for four instruments, a concerto as a sonata for one or more instruments with an orchestral accompaniment, and so forth. The form is the same in all cases, but it appears in different instrumental clothing.

The first thing to be noticed about this form is that it consists of distinct and separate *movements*. Usually these show decided differences, and, barring an occasional exception in the case of the last two movements, they are separated by complete intervals or rests. In this the form differs from most other types of structure.

The movements usually number three or four. Concertos almost always consist of three members, symphonies of four. In character, tempo, and form a sequential arrangement is observed. The tempo of the first movement is generally rapid, the character bold, assertive, or determined. The second movement is supposed to form a contrast. Ordinarily it is of a slow tempo,—peaceful and serene in expression when written

in major, or sad and pensive when in minor. In the older sonatas and symphonies the third member was usually a minuet, but with Beethoven the sprightly scherzo was introduced. The fourth movement reverts to a fast tempo,—sometimes, as with Haydn, being playful in character, sometimes grand and triumphant.

As to the structure of the individual members, the minuet or scherzo are naturally written in the forms of similar name. The second movement is likely to make use of some comparatively simple form,—such as the theme and variations, or one of the more elementary rondo types to be considered later. The first and last movements are more complex. The former is almost invariably, and the other very frequently, written in the form which may be considered as specifically characteristic of the sonata. A sonata, to repeat, consists of several movements; but not every composition of several movements is a sonata. Suites, for instance, are also composed of independent parts. In order that a series of pieces may constitute a sonata, one, at least, of the members must be written in the characteristic form just mentioned. It is often referred to as the *sonata form*, but had better be styled *first movement form*, since *sonata* refers to the whole group of movements, and the form in question merely designates the essential member of the group.\*

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\* The terms *principal form*, *allegro form*, and *sonata-movement form* are also used.

The first movement form consists of three sections, of which the first and third are almost alike, while the second is different. Often there is also an introduction, and more frequently still a concluding passage, or coda. Since these are not always present, however, we shall not treat them as necessary elements.

1. The first section is subdivided into three smaller divisions, known as chief theme, subordinate theme, and closing themes. The chief theme is highly important and gives character to the whole movement. The subordinate theme is usually a contrast,—in character, harmony, and general structure. If the chief theme is in minor, the subordinate one is in major; if the first is bold and impetuous, the other is likely to be calm and soothing. The third division—comprising the closing themes — consists of one or more melodic passages which bring the first part to a termination. After this the whole first section is repeated. One can easily tell, on the printed page, how far it extends, by looking for the marks of repetition. At the concert, however, the repetition is nowadays often omitted, the conductor passing at once to the second member.

2. This is technically known as the development. It has no subdivisions, similar to the first part, but simply elaborates the elements composing the first. The various figures, motifs, and passages that have preceded are thrown together in ingenious and beautiful combinations and variations. The development may be long or short.

Sometimes it covers only a few measures, sometimes it approaches the dimensions of the first section.

3. After the development comes section number three. It is practically a counterpart of the first, though with certain changes of key, and without the marks of repetition. Accordingly we again have the same subdivisions: chief, subordinate, and closing themes. With these the movement sometimes comes to an end, but generally a coda is added, which may be only a few measures in length, but which occasionally swells to larger proportions. In such cases it assumes the aspect of a second development.

The following is an outline of the first movement form:—

(Introduction)		
First Section		
Chief theme	Subordinate theme	Closing themes
Second Section (Development)		
Third Section		
Chief theme	Subordinate theme	Closing themes
(Coda)		

This form is most advantageously studied in the sonatas of Mozart, which are regular in structure, and present less exceptions to the rules than those of most other masters. Among Beethoven's sonatas, the one in G major, Op. 14, No. 2, is a good specimen. It opens without introduction. With measure 26 the subordinate theme enters (in thirds), and with measure 47 the closing themes. Then comes the repetition, and after this the development. It is spun out for 61 measures, and leads to the third section. There is a short coda of 13 measures.

The last movement of a sonata or symphony may also be written in the first movement form. Often, however, it is moulded in one of the more intricate *rondo* forms, which brings us to the remaining topic of this chapter. *Rondo* is the name given to compositions in which a theme alternates with one or more subsidiary passages or *episodes*, every excursion into a contrasting section being followed by a repetition of the theme. Rondos may be divided into three classes, although five and six have been proposed. In compositions of the first class there is but one subsidiary passage. The scheme of this type is as follows: theme — episode — theme. In works of the second class there are two subsidiary passages, disposed in this manner: theme—first episode — theme — second episode — theme. Thus far the structures can be treated as amplifications of the primary forms. The third class is a combination of the first movement form with the simpler rondo forms. It

differs from the former inasmuch as there is no repetition of the first section, while two extra appearances of the chief theme are introduced, — one directly after the first section (replacing the repetition), and one at the conclusion of the third; besides, the development is usually transformed into a more independent section, bearing the character of an episode. The form of this species of rondo might accordingly be expressed in this manner: chief theme — subordinate theme (sometimes with closing themes) — chief theme — episode (sometimes with development) — chief theme — subordinate theme — chief theme (often in the form of a coda). Analysis reveals that this is essentially identical with the second rondo form, the difference being that the first episode and theme are introduced once more at the end. Substituting the former terminology for that just employed, we obtain this plan: theme—first episode —theme—second episode—theme—first episode—theme (or coda). Evidently this is merely an extension of rondo form number two.

Whatever may have been the historic origin of the "sonata rondo," in broad outline and essential structure it is reducible to the simpler forms. We may say that there are but two types of rondo: that in which a theme alternates with one episode and that in which it alternates with two. Or if we wish to carry the reduction still further, we may return to our original statement, defining the rondo as a composition in which a theme alternates with one or more subsidiary passages. This,

indeed, is the essential feature of the form, and the only one which the layman need bear in mind. It is not necessary, when one merely wishes to gain a fair appreciation of classic music, to enter into all the subtle differences according to which rondos have been distinguished from one another. Five and six classes have been recognized, to repeat, and it would be possible, by refining the distinctions, to increase the number well on toward a dozen. But the differences are so slight that only a connoisseur would recognize them. Contrast and repetition,—this is the soul of the rondo; and if one merely pays attention to this the enjoyment will be considerable, although increasing minuteness of analysis, when not unaccompanied by emotional depth and the elementary susceptibility, may yield a heightening of enjoyment.

*Carl B. Miller.*

## INSTRUMENTAL EFFECTS

INSTRUMENTAL effects attain their finest manifestation in the orchestra, to which we shall confine our considerations in this chapter.

Orchestral instruments may be divided into four classes: string, wood wind, brass wind, and percussion. String instruments include the violin, viola, violoncello, contrabass, and harp. The violin is generally written in two parts, distinguished as first and second violins; the latter is somewhat lower in pitch than the other and bears the relation to it of alto to soprano. The viola is a larger and deeper violin, with a downward reach of five tones beyond that of the violin. Deeper still is the violoncello, the pitch of which extends an octave below that of the viola. The gigantic contrabass concludes the group of what is known as the string band, which comprises all the instruments mentioned except the harp.

The violin family occupies the most important place in the orchestra. It predominates in all good music, the greatest variety of effects is attainable through it, its instruments are the most expressive, and one tires of them least easily. Hence Hanslick was right in declaring that music owed more to the sheep than the nightingale, the intestines of the former animal furnishing most

of the strings used in the violin family. Among the special effects obtainable on the instruments of this family are the *sordino*, executed with the help of a clamp placed on the bridge of the instruments and giving the tone a veiled character; the flageolet or harmonic tones; and the *pizzicato*, in which the strings are picked with the fingers.

The string quartet, for which much excellent music has been written, consists of the first and second violins, viola, and violoncello. The only other string instrument of importance in the orchestra is the harp: its efficacy depends largely on the admirable arpeggio effects producible on it.

The wood winds comprise, among other instruments, the piccolo, flute, oboe, clarinet, bassoon, bass clarinet, and English horn. In importance this group ranks next to the strings. Its main instruments are the flute, oboe, clarinet, and bassoon. The flute is familiar to everybody. The oboe and clarinet are similar in size and general appearance, but differ through the presence of a mouthpiece and the widening in diameter at the further end. They are held straight out in front of the player, instead of sidewise, like the flute.\* In quality of tone the flute is clear and brilliant, the oboe plaintive and somewhat nasal in character, the clarinet rich and full.

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\* It is not intended, of course, to give scientific descriptions of the instruments, but only to draw attention to certain external features which will enable the layman to recognize them.

The bassoon, or bass of the group, is much larger than the other members: a long, black mechanism, it is held away from the performer and is played through a curved metal tube. Its quality of tone easily makes it sound grotesque, whence it has been styled the clown of the orchestra. Among the remaining members of this class, the piccolo is a smaller and higher flute, effective in military music, and the English horn a lower oboe, bearing the same relation to the oboe that the viola bears to the violin; like the oboe it has a melancholy tone, and is much used in pastoral music.

Among the brass winds the chief instruments are the French horn, trumpet, cornet, trombone, and bass tuba. The French horn is the round instrument, with many convolutions, which is partly covered by the arm of the player; the trumpet and cornet are short and slightly elongated; longer and deeper, the trombone is generally made with a slide, which changes the length of the instrument and thus produces differences of pitch; the bass tuba, finally, is a gigantic, ponderous-looking mechanism, with a large, bell-like opening at the further end. In pitch, the trumpet and cornet are the highest, both emitting brilliant, piercing sounds, and being eminently suited for military music and triumphal fanfares. Next comes the French horn, with a rich, mellow timbre. The trombones have a sonorous, noble quality of tone, and give body and firmness to the waves of orchestral sound. Deepest of all, the bass tuba corresponds to the contrabass in the violin family; it is extremely powerful, a

single tuba being distinguishable in a passage performed by the entire orchestra.

Instruments of percussion consist of mechanisms which do and which do not emit tones of definite pitch. To the former belong the kettle drums, xylophone, and bells, to the latter the snare drum, bass drum, cymbals, and triangle. The kettle drum is a valuable member of the orchestra; besides giving rhythmic precision and force, it produces certain effects which are unattainable on any other instrument.

With respect to the peculiar timbres or tone-qualities of the instruments, verbal exposition avails but little, for it is almost as difficult to give an adequate description of shadings of tones as of tastes or odours. But the reader is probably acquainted with enough instruments to appreciate the great source of effectiveness which they afford the composer. The orchestra is his palette, and the instruments are the colours, which he spreads out to produce characteristic effects. Indeed, the shadings of sound resulting from the combination of orchestral instruments may very aptly be compared to the colour-effects of pictures. The difference between a composition played by a full orchestra, with its instrumental gleams and tints, and the same composition performed by a single instrument, like the piano, is comparable to that between a beautiful oil painting and an engraving. The contours and figures are there, but the warmth of colouring is gone. Indeed, the gain in effect

may even be greater in the case of audible colour. At times only a single instrument may be playing, at times again a whole group will take up the thread of melodic progression; a theme may announce itself in the violins, sound back in the clarinets, leap up to the flutes, then sweep by majestically in the trumpets; a hush may fall over the orchestra, with the strings emitting an occasional *pizzicato* chord, or the drums muttering portentously in the bass; then all at once the entire orchestra will crash forth in a tremendous chord, and rush precipitately toward the joyous, triumphant finale.

On account of the great length of the passages involved, it is not easy to illustrate instrumental effects. The following progression, however, which contains an unusual number of changes and contrasts in a short space, may give some idea of their picturesque variety:—

## BEETHOVEN : Symphony No. 3.

The musical score consists of three staves. The top staff is for Oboes, the middle for Violins, and the bottom for Cellos and Contrabasses. The Violin staff features sixteenth-note patterns. The Cello/Contrabass staff shows sustained notes with fermatas. Measure numbers 8 and 9 are indicated above the staves.

Oboes.

Violins.

Cellos and Contrabasses.

The image displays three staves of musical notation, likely from a piano score, illustrating specific parts of an orchestra. The top staff is labeled "Flutes." It features a treble clef and a bass clef, with a key signature of one sharp. The middle staff is labeled "Bassoons." It also has a treble clef and a bass clef, with a key signature of one sharp. The bottom staff is labeled "Oboes and Bassoons." It includes both a treble clef and a bass clef, with a key signature of one sharp. The notation consists of various note heads and stems, with some notes grouped by vertical lines. Measures are separated by vertical bar lines, and a repeat sign with a circled '8' is present in the upper staff.

N. B. In order to facilitate performance on the piano, some of the parts have been transposed. Thus the bassoon progression in measure five ought to be played lower than it is written; the violin figures, on the other hand, ought to be played higher.

Manifestly the appreciation of such effects is of great importance in the understanding of orchestral compositions. The following are a few practical rules to help the novice. In the first place the mere recognition of the facts, the mere awakening of attention, will already be of assistance. Be on the lookout for beautiful effects, and they will fall upon your notice. Be ready from moment to moment to note any decided change in the instrumental colouring,—to detect any sudden alteration in the kind of instruments employed or in the number playing; be ready also to analyze instrumental combinations into the most important members simultaneously taking part in them. It is not necessary to name every single instrument in such a case — a feat which none but a trained ear could hope to accomplish — but only to pick out the more prominent instruments or groups, instead of receiving the passages merely as huge, homogeneous, unbroken masses of sound.

The mere will and effort to analyze, then, will already be productive of results. As a further aid the reader may place himself, when attending a concert, in a position from which he can see many of the instruments and performers. By watching these he will often be able to tell when certain instruments are playing and when they are not. It may also be advantageous to pay some attention to the conductor, for he often indicates when the players are to begin their parts, and thus furnishes a cue for the attention.

Finally, the reader may study the score of some com-

position he expects to hear, choosing an easy piece to begin with, such as the slow movement of a symphony. He must first play this over from the piano arrangement, so as to familiarize himself with the contents; next he must compare the piano arrangement with the score, picking out the important voices and themes in the latter; and finally he must take the score to the concert, and follow it during the rendition of the piece.

The orchestra is the vehicle *par excellence* of all the beautiful effects and varied possibilities of instrumental music. It offers an admirable field for the elaboration of contrapuntal intricacies, as its different instruments can easily carry along various motifs simultaneously and still keep them perfectly distinct. Again it is splendidly adapted for the display of thematic work, ranking second to no other species of tonal art in this respect, with the possible exception of chamber music. Like all purely instrumental music, furthermore, it is well suited for the development of interesting forms, and in the symphony has given us the most highly developed form extant. Finally it offers us a wealth of colour-combinations beyond anything to be met with elsewhere. He, consequently, who appreciates orchestral masterpieces in all their aspects, not only has a source of supreme delight at his disposal, but may consider himself thoroughly initiated into the mysteries of the musical art.

## THE COMBINATION OF FACTORS

HAVING considered the various analytic factors of musical appreciation singly, it will now be in order to take up their combination and interplay. To do this most effectively it would be desirable to have the complete scores of appropriate compositions at hand for inspection. As this is not feasible, it may be well to select a single composition and give excerpts showing the most interesting contrapuntal, thematic, and instrumental portions. The formal features, depending on a connected view of the entire composition, are not easy to represent. We shall choose for our purpose the first movement of Beethoven's Symphony No. 4. The following is the chief theme of this movement:—

a. Violins.

ff

Or - ches -

The musical score consists of six staves of music. 
 - The first two staves are for the strings, with the top staff labeled 'b. 1st Violins.' and the bottom staff labeled 'Strings.  
1st Violins  
and Oboes.' Both staves include a dynamic marking 'p' above them. The first staff has a bass clef and the second has a treble clef. The third staff begins with a bass clef and a dynamic 'tra.' followed by a treble clef. 
 - The fourth and fifth staves are identical, showing eighth-note patterns in common time. 
 - The sixth staff starts with a bass clef and a dynamic 'dolce.' followed by a treble clef, labeled 'Wood wind.' It features grace notes and slurs.

There are three sections to the theme, marked *a*, *b*, *c*, which it will be well to note, as the thematic development of the movement rests largely on them. Note also the varied instrumentation of the parts, *a* being given by the complete orchestra, *b* by the strings, and *c* by the wood wind.

More interesting still, from an instrumental point of view, is the subordinate theme:—

The musical score consists of four staves, each with a different instrument's name above it. The first staff is labeled "Oboes." It starts with a measure of rests followed by a measure of eighth-note patterns. The second staff is labeled "Bassoons." It starts with a measure of rests followed by a measure of eighth-note patterns. The third staff is labeled "Strings." It starts with a measure of rests followed by a measure of eighth-note patterns. The fourth staff is labeled "Flutes." It starts with a measure of rests followed by a measure of eighth-note patterns.

Built on this theme is the following delightful little canon, also with varied instrumentation:—

The musical score consists of four staves. The first staff is labeled "Clarinets." It starts with a measure of eighth-note patterns. The second staff is labeled "Bassoons." It starts with a measure of rests followed by a measure of eighth-note patterns. The third staff is labeled "Strings and Brass." It starts with a measure of rests followed by a measure of eighth-note patterns. The fourth staff is a bass staff with a C-clef, showing sustained notes throughout the measures.

Flutes and  
Violins.

Low strings.

The melody of this canon, again, is later subjected to a peculiar syncopated treatment:—

Orchestra.      Violins.

Orchestra.      Violas.

Orchestra.

Orchestra.

A beautiful bit of counterpoint occurs where the vital section of the chief theme, in the bassoons, is accompanied by a sweet melody in the violins and cellos. Later the instruments are exchanged, the strings assuming the chief theme and the wood wind the accompanying melody:—

Violins and Cellos.

Bassoons.

(Occasional chords in strings.)

Wood wind.

Violins and Cellos.



This interplay of melodies is continued for a while, until we have a magnificent burst of sound in the entire orchestra, of which a rhythmic figure derived from the chief theme is the basis. An interesting thematic development now follows, in which fragments of the figure interlock in different instruments:—

Orchestra.

Low strings.

1st and 2nd Violins.

*sempre f*

Or - ches -

## THE COMBINATION OF FACTORS

77

## 1st Violins.

Musical score for three staves:

- 1st Violins:** Treble clef, B-flat key signature. Notes include eighth-note pairs and sixteenth-note patterns. Dynamics: *dim.*, *p*.
- 2nd Violins:** Bass clef, B-flat key signature. Notes are marked with 'x' or dots.
- Orchestra:** Bass clef, B-flat key signature. Notes are marked with 'x' or dots.

Labels below the staves: *tra.*, 2nd Violins., Orch.

## 1st Violins.

Musical score for three staves:

- 1st Violins:** Treble clef, B-flat key signature. Notes include eighth-note pairs and sixteenth-note patterns. Dynamics: *pp*.
- Orchestra:** Bass clef, B-flat key signature. Notes are marked with 'x' or dots.
- 2nd Violins:** Bass clef, B-flat key signature. Notes are marked with 'x' or dots.

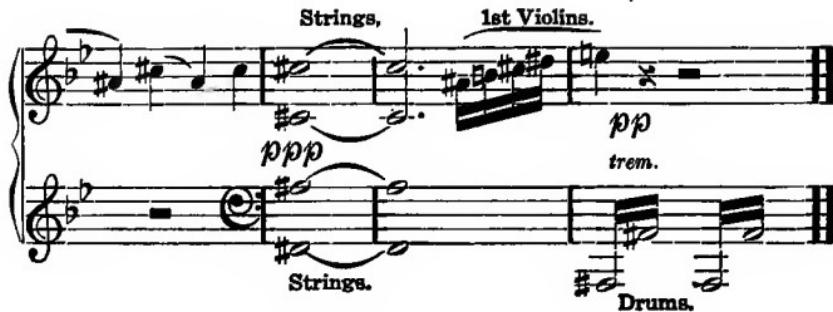
Labels below the staves: Orch., 2nd Violins.

*sempre pp*

Musical score for two staves:

- 1st Violins:** Treble clef, B-flat key signature. Notes are connected by slurs. Dynamics: *sempre pp*.
- 1st Violins alone:** Treble clef, B-flat key signature. Notes are connected by slurs.

Label below the staves: 1st Violins alone.



The section ends with a mysterious rumble in the drums, accompanied by a recurrence of the initial figure of the main theme. Thereupon we have a wonderful passage in which the first and third sections of the main theme play the principal parts and which finally leads back into the repetition of the main theme (third division of the first movement form). The instrumentation of this section, too, is marvellous:—



## THE COMBINATION OF FACTORS

79

Strings.

2nd Violins and Violas.

2nd Violins.

Cellos.

Flutes.

1st Violins.

1st Violins.

Strings and Horns.

1st Violins.

*pp* trem.

Strings and Horns.

*sempre pp*

Drums.

Drums.

Musical score for two voices and basso continuo. The top staff shows two voices: '2nd V.' and '1st V.'. The '1st V.' part includes a measure with a '3' over a sixteenth-note cluster and a '2.' over a eighth-note cluster. The bottom staff shows the basso continuo part with continuous eighth-note patterns.



So far the features of interest were brought to view in comparative isolation, some sections being selected by reason of their interesting display of counterpoint, others on account of their admirable thematic development, and others again for their instrumental variety. It will be well, now, to add an example in which all three of the factors are combined in the production of a total effect.

A section from the first movement of Beethoven's Symphony No. 2 will answer our purpose:—

A musical score excerpt featuring two staves. The top staff is labeled 'Violins.' and the bottom staff is labeled 'Low strings.'. The top staff has a dynamic marking 'f' and the bottom staff has a dynamic marking 'ff'. The music consists of eighth-note patterns. The score is divided by a vertical bar.

The musical score consists of four staves of music, likely for orchestra, arranged vertically. The top three staves are in G major (indicated by a single sharp sign) and the bottom staff is in F major (indicated by one sharp sign and one flat sign). The music is divided into measures by vertical bar lines.

- Staff 1:** Treble clef. Dynamics: *sf*, *sf*. Measures show eighth-note patterns.
- Staff 2:** Bass clef. Dynamics: *sf*. Measures show eighth-note patterns.
- Staff 3:** Treble clef. Dynamics: *sf*, *sf*. Measures show eighth-note patterns.
- Staff 4:** Bass clef. Dynamics: *sf*, *sf*. Measures show eighth-note patterns.

Below the score, the instruments performing specific parts are labeled:

- Flutes:** Indicated above the first and third measures of the top staff.
- Violins:** Indicated above the second measure of the middle staff.
- Bassoons and Oboes:** Indicated below the first and third measures of the bottom staff.
- Low strings and Bassoons:** Indicated below the fourth measure of the bottom staff.

## THE COMBINATION OF FACTORS

83

**Violins.**

*f* Wood wind.

**Orchestra.**

**Violins.**

*sf* Wood wind. *sf*

**Violins.** **Violins.**

*sf* Wood wind. *sf* Wood wind.

**Strings and Brass.** **Strings and Brass.**

**Violins.** **Violins.**

*sf* Wood wind. *sf* Wood wind.

**Strings and Brass.** **Strings and Brass.**

Strings.

Bassoons and Low strings.

Bassoons and Low strings.

*sf*

Violins.

*sf*

Bassoons and Low strings.

(orchestra filling out the harmony.)



The section opens with a contrapuntal interplay of voices, which is at first confined to the strings, but in which the wood wind later takes part. Thematic treatment appears in measures 9—12, where the original melodies are abbreviated. From measure 13 on, the sixteenth-note figure of one of the melodies forms the basis of progression, and toward the end of the section we have some effective inversions of this figure. Throughout there are interesting changes of instrumentation, which doubtless are intelligible without specific explanation.

Classic music is rich in examples similar to those cited in this chapter. Confining ourselves for the present to the symphonies of Beethoven, we may mention the first and last movements of the third symphony, the second movement of the fifth, and the second movement of the seventh. The finale of the third symphony, especially, is a wonderful piece of workmanship, which will repay careful examination. We should have quoted from it, were it not for the fact that the beauties are scattered

too much for convenient illustration. Passing over its countless thematic intricacies, let us but refer to the marvellous contrapuntal treatment of a passage which occurs immediately after the two little variations that succeed the initial theme. There are seven different strands of melodic progression in this passage, two of them being complete melodies, one a running accompaniment, one a stationary voice, and two of the others likewise embodying a certain melodic independence. It is one of the most interesting contrapuntal passages in the entire list of Beethoven's symphonies.

## C O N C L U S I O N

BEFORE we conclude our treatise, we must introduce a few qualifications of the statements we have been making, and thereby revert again to the principles of the opening chapter.

Although the charm of classic music resides largely in the special or analytic factors on which we have been dwelling, it would be a mistake to suppose that the analysis implied must be scientifically accurate and thorough. We need not name, and ascribe to its proper place in the structural mould, every little section of a composition; if we only note the larger and more prominent features — the principal contrasts and repetitions — we may extract a good deal of enjoyment from this source, although the pleasure may conceivably grow with the minuteness of analysis. What is true of the larger, architectural features, is also true of the others. It is not necessary to pick out the melodies and figures of a contrapuntal complex with such accuracy and definiteness as to be able to reproduce them note for note, classify every thematic alteration under the proper one of the dozen or more categories, or recognize every instrument taking part in an orchestral burst of sound. If only we follow the larger outlines of the voices, take note in a

general way of the thematic disguises, and recognize the various groups of instruments, together with the most prominent of the individual members, our enjoyment will be considerable.

We must not forget, too, that all this analysis is, after all, not the most important factor of appreciation. The elementary susceptibility, ever accompanying and underlying the analytical operations of the brain, remains the principal element, of greater value than any amount of insight into structural details. A generous share of elementary susceptibility, without any analysis whatever, will yield more enjoyment than the minutest understanding without the susceptibility. The latter is the foundation, upon which every superstructure must be erected.

Indeed, not only are the analytical factors not of paramount importance, but in case they lessen the vigour of the elementary glow they may even prove detrimental. There is reason to believe that acuteness of analysis sometimes has a desiccating, impoverishing effect on the emotions. But no amount of intellectual insight can make up for a loss of emotional warmth: better a bare, homogeneous sense of elevation of spirit, without any intellectual activity, than the most thorough insight into formal complexities, without an infusion of feeling.

It is refreshing to find, accordingly, that musical enjoyment is after all not so much a matter of dry rules and calculations as of natural endowment and spontaneous emotional response; that not only the rich and cultured, but also the poor and untaught, may share its

beauty and charm. The performance of music, to be sure, is not possible without long and tedious training, but its enjoyment may be reaped with a normal ear and the ordinary emotional and intellectual faculties. Like health, love, joy, and all the other great boons of life, music is given to us, not sold; like them it is priceless, hence no price is set upon it. Music, also, may be included among the blessings of which Lowell speaks, when he says:—

'Tis heaven alone that is given away,  
'Tis only God may be had for the asking.

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